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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,368	03/18/2004	Yuuki Inoue	2271/71533	9208

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EXAMINER	
DICKER, DENNIS T	
ART UNIT	PAPER NUMBER
2625	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/804,368	INOUE, YUUKI	
	Examiner	Art Unit	
	DENNIS DICKER	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 June 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,12,23 and 34-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,12,23 and 34-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *18 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/30/2008 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 12, 23, 34-43 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1, 12, 23, 34, 35-37 and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rylander (hereinafter "Rylander '648 " WO 93/20648) in view of Ohkubu (hereinafter "Ohkubo '659" US PUB 2002/0163659)).

With respect to **Claim 1**, Rylander '648 teaches an image processing method for performing color conversion among a plurality of image forming apparatuses **(i.e., Abstract)**, including a first printer and a second printer **(i.e., 56 and 66 of Fig. 1)**, comprising the steps of: a) producing a plurality of color profiles provided for performing color conversion on input image information within a same color space or through different color spaces **(i.e., Col. 5 lines 13-31 , color profiles may be created for color conversion from one color space to another color space for different printers);** b) selecting a color profile from said plurality of color profiles **(i.e., Col. 15 Lines 25-30 , by approximation the best color profile is selected for the printing system).**

Rylander '648 does not explicitly teach using said selected color profile to convert input data, in a standard computer monitor color space to converted color data, in a device-dependent color space of said second printer for reproducing color obtained by said first printer by applying said input color data, each of said input color data and said converted color data corresponding to a same color in a predetermined device-independent color space which does not depend on apparatus types, the color profile being generated by a process including d) producing, in a computer, color patch data from uniformly dividing a standard color space of a computer monitor; d) Obtaining corresponding color patches in an image formed from said first image forming apparatus of an apparatus type of said first printer according to said color patch data in the standard color space of the computer monitor; f) measuring coordinate values of the color patches in the predetermined device independent color space; g) obtaining a

relationship for each color patch, between the first color space which depends on the apparatus type of the first printer and the predetermined device independent color space, based on a measurement result of (f); h) obtaining a relationship between the predetermined device0independent color space in an image formed by a second image forming apparatus of an apparatus type of said second printer and a second color space which depends on said apparatus type f said second printer and i) calculating a coordinate value in the second color space which depends on the apparatus type of said second printer for each color path whereby color of an image formed by said second printer has a color difference which is effectively reduced from color of an image formed by said printer according to the relationship between the predetermined device-independent color space in an image formed by said second printer and the second color space which depends on he apparatus type of said second printer, obtained in (h), wherein color in an image formed by said second printer using said device-dependent input color data is visually equal to color of an image formed by said first printer using said converted device-dependent color data.

However, the mentioned claimed limitations are well known in the art as evidenced by Ohkubo '659, In particular, Ohkubo '659 teaches the use of using said selected color profile to convert input data, in a standard computer monitor color space **(i.e., 810 and 850 of Fig. 12 and Para 0124, input data of standard computer monitor color space)** to converted color data, in a device-dependent color space of said second printer **(i.e., 970 of Fig. 12 and Para 0129, color profile is selected based on a standard monitor color space and device dependent color space of**

second printer), for reproducing color obtained by said first printer by applying said input color data **(i.e., Para 0129, natural impression of an image is maintained)**, each of said input color data and said converted color data corresponding to a same color in a predetermined device-independent color space which does not depend on apparatus types **(i.e., Para 0137)**, the color profile being generated by a process including d) producing, in a computer , color patch data from uniformly dividing a standard color space of a computer monitor **(i.e., Para 0078, 0081 and 0124,);** e) Obtaining corresponding color patches **(i.e., Para 0125 and 880 of Fig. 12,)** in an image formed from said first image forming apparatus of an apparatus type of said first printer **(i.e., 870 of fig. 12 and Para 0124,)** according to said color patch data in the standard color space of the computer monitor **(i.e., 830 of Fig. 12 and Para 0124)**; f) measuring coordinate values of the color patches in the predetermined device independent color space **(i.e., Para 0124, LAB values are obtained);** g) obtaining a relationship for each color patch **(i.e., Fig. 12)**, between the first color space which depends on the apparatus type of the first printer and the predetermined device independent color space, based on a measurement result of (f) **(i.e., 870 of Fig 12 and Para 0124, a relationship is obtained in the predetermined device independent color space and the first printer color patches),** h) obtaining a relationship between the predetermined device-independent color space in an image formed by a second image forming apparatus of an apparatus type of said second printer and a second color space which depends on said apparatus type of said second printer **(i.e., Para 0126, relationship of predetermined device independent color space and second**

printer color space) and i) calculating a coordinate value **(i.e., 970 of Fig. 12 and Para 0129)** in the second color space which depends on the apparatus type of said second printer for each color path **(i.e., 952 of Fig. 12 and Para 0129)** whereby color of an image formed by said second printer has a color difference which is effectively reduced from color of an image formed by said printer **(i.e., Para 0026,)** according to the relationship between the predetermined device-independent color space in an image formed by said second printer and the second color space which depends on the apparatus type of said second printer **(i.e.,940 of Fig 12 and Para 0126, colorimeter measures color space of second printer and associates it with the predetermined device independent color space)** obtained in (h), wherein color in an image formed by said second printer using said device-dependent input color data is visually equal to color of an image formed by said first printer using said converted device-dependent color data **(i.e., 970 of Fig. 12 and Para 0129,color in second color printer is visually equal to first printer).**

In view of this, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the image processing method of Rylander '648 as taught by Ohkubo '659 since Ohkubo '659 suggested in Para 0015-0016 that such a modification would provide a color conversion definition creating method capable of readily creating a high quality conversion definition.

With regards to program of **Claim 12**, the limitations of the claim 12 are corrected by limitations of claim 1 above. The steps of claim 12 read into the function steps of claim 1.

With regards to the computer readable medium of **Claim 23**, the limitations of the claim 23 are corrected by limitations of claim 1 above. The steps of claim 23 read into the function steps of claim 1.

With regards to the apparatus of **Claim 34**, the limitations of the claim 34 are corrected by limitations of claim 1 above. The steps of claim 34 read into the function steps of claim 1.

With respect to **Claim 35**, Rylander '648 teaches the use an image processing apparatus, which comprises teaches an image processing apparatus, wherein: said plurality of color profiles are provided from actually measuring color of an image formed by one of said plurality of image forming apparatuses **(i.e., Column 1 Lines 22-25, measuring of an image formed by an image forming apparatus)**,

Rylander '648 does not explicitly teach creating a color profile whereby color of an image effectively approximating the measured color is formed by another of said plurality of image forming apparatuses approximately equal thereto

However, the mentioned claimed limitations are well known in the art as evidenced by Ohkubo '659, In particular, Ohkubo '659 teaches the use of creating a color profile whereby color of an image effectively approximating the measured color is formed by another of said plurality of image forming apparatuses approximately equal thereto **(i.e., Para 0027, a reference area is used to approximate color area of the arbitrary device)**

In view of this, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the image processing method of Rylander

'648 as taught by Ohkubo '659 since Ohkubo '659 suggested in Para 0015-0016 that such a modification would provide a color conversion definition creating method capable of readily creating a high quality conversion definition.

With respect to **Claim 36**, Rylander '648 does not explicitly teach an image processing apparatus, wherein: said plurality of color profiles comprise color profiles whereby a color difference in a color space, which does not depend on apparatus types between images formed by the image forming apparatuses may be made to effectively approximate each other

However, the mentioned claimed limitations are well known in the art as evidenced by Ohkubo '659, In particular, Ohkubo '659 teaches the use of an image processing apparatus, wherein: said plurality of color profiles comprise color profiles whereby a color difference in a color space, which does not depend on apparatus types between images formed by the image forming apparatuses may be made to effectively approximate each other **(i.e., Para 0126, color conversion definition is created to approximate a color 'close' to a representation area of an arbitrary device).**

In view of this, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the image processing method of Rylander '648 as taught by Ohkubo '659 since Ohkubo '659 suggested in Para 0015-0016 that such a modification would provide a color conversion definition creating method capable of readily creating a high quality conversion definition.

With respect to **Claim 37**, Rylander '648 does not explicitly teach an image processing apparatus wherein: said color space which does not depend on apparatus

types comprises any one of an LAB color space, an XYZ color space '.and an LUV color space defined by CIE' .

However, the mentioned claimed limitations are well known in the art as evidenced by Ohkubo '659, In particular, Ohkubo '659 teaches the use of an image processing apparatus wherein: said color space which does not depend on apparatus types comprises any one of an LAB color space, an XYZ color space '.and an LUV color space defined by CIE'**(i.e., 0124-0125, LAB color space values are used).**

In view of this, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the image processing method of Rylander '648 as taught by Ohkubo '659 since Ohkubo '659 suggested in Para 0015-0016 that such a modification would provide a color conversion definition creating method capable of readily creating a high quality conversion definition.

With respect to **Claim 40**, Rylander '648 teaches an image processing apparatus wherein: said plurality of color profiles Comprise color conversion tables for performing color conversion from an RGB color space to a CMYK color space **(i.e., Col. 1 Lines 22-25, color profiles in the RGB color space are converted to CMYK color space by the table [74 of Fig. 1]).**

With respect to **Claim 41,** Rylander '648 teaches an image processing apparatus further comprising, a part selecting a color profile to be applied from among the plurality of color profiles **(i.e., Col. 7 Lines 23-25, a print profile containing comprising a set of data points are selected to be applied).**

With respect to **Claim 42,** Rylander '648 teaches image forming apparatus comprising said part selecting a color profile to be applied from among the plurality of color profiles **(i.e., Col. 7 Lines 23-25, a print profile containing comprising a set of data points are selected to be applied).**

Rylander '648 does not explicitly teach an image processing apparatus wherein: a host computer which provides printing information to the image forming apparatus.

However, the mentioned claimed limitations are well known in the art as evidenced by Ohkubo '659, In particular, Ohkubo '659 teaches the use of an image processing apparatus wherein: a host computer which provides printing information to the image forming apparatus **(i.e., Para 0066).**

In view of this, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the image processing method of Rylander '648 as taught by Ohkubo '659 since Ohkubo '659 suggested in Para 0015-0016 that such a modification would provide a color conversion definition creating method capable of readily creating a high quality conversion definition.

2. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over '978 in view '659 as applied to Claim 34 above and in further of Akira (hereinafter " Akira '938" JP 2001-358938).

With respect to **Claim 38,** Rylander '648 and Ohkubo '659 does not explicitly teach an image processing apparatus comprising a printer driver provided in a host computer which outputs printing information to the image forming apparatus.

However, the mentioned claimed limitations are well known in the art as evidenced by Akira '938, In particular, Akira '938 teaches the use of image processing apparatus comprising a printer driver provided in a host computer which outputs printing information to the image forming apparatus **(i.e., Para 0012, computer provided with a printer driver which outputs the data in the computer to the printer).**

In view of this, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the image processing apparatus of Rylander '648 and Ohkubo '659 as taught by Akira '938 since Akira '938 suggested that such a modification would utilize a host computer to control and send print information to an image forming apparatus for overall control of an image forming apparatus from a remote location.

3. Claims 39 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over '978 in view '659 as applied to Claim 34 above and in further of Kanamori et al (hereinafter " Kanamori '978 " US 4,929,978).

With respect to **Claim 39**, Rylander '648 and Ohkubo '659 do not explicitly teach an image processing apparatus comprising a controller provided in one of the plurality of image forming apparatuses which forms an image having color which is made to effectively approximate color of image formed by another of said plurality of image forming apparatuses with the use of the color profile.

However, the mentioned claimed limitations are well known in the art as evidenced by Kanamori '978, In particular, Kanamori '978 teaches an image processing

apparatus comprising a controller provided in one of the plurality of image forming apparatuses which forms an image having color which is made to effectively approximate color of image formed by another of said plurality of image forming apparatuses with the use of the color profile **(i.e., Column 6 Lines 8-25, the image forming apparatus is provided with a controller that forms an image which is made o effectively approximate color of another with the use of a profile)**

In view of this, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the image processing apparatus of Rylander '648 and Ohkubo '659 as taught by Kanamori '978 since Kanamori '978 suggested that such a modification would provide a color correction method applicable to a color copier apparatus whereby correction can be executed to a high degree of accuracy that is independent of variable factors such as manufacturing variations in the characteristics of a printing system of the color copier apparatus.

With respect to **Claim 43**, Rylander '648 and Ohkubo '659 do not explicitly teach an image processing apparatus comprising the image processing apparatus and an image forming part which forms a visible image on a recording medium based on image information output from said imago processing apparatus.

However, the mentioned claimed limitations are well known in the art as evidenced by Kanamori '978, In particular, Kanamori '978 teaches an image forming apparatus comprising: the image processing apparatus and an image forming part which forms a visible image on a recording medium based on image information output from said imago processing apparatus **(i.e., 13 and 14 of Fig. 1, a visible image is**

formed on a recording medium based on image information from said image processing apparatus).

In view of this, it would have been obvious to one having ordinary skill in the art at the time of invention was made to modify the image processing apparatus of Rylander '648 and Ohkubo '659 as taught by Kanamori '978 since Kanamori '978 suggested that such a modification would provide a color correction method applicable to a color copier apparatus whereby correction can be executed to a high degree of accuracy that is independent of variable factors such as manufacturing variations in the characteristics of a printing system of the color copier apparatus.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DENNIS DICKER whose telephone number is (571)270-3140. The examiner can normally be reached on Monday -Thursday 7:30 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. D./
Examiner, Art Unit 2625
10/2/2008

/Twyler L. Haskins/
Supervisory Patent Examiner, Art Unit 2625